

**TB-0353**

**NATURAL PROGRAMS  
STOWED IN VERSION 2 AND EARLIER**

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Section/Group: Database Administration  
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Software AG has dropped maintenance support for Natural 3.1.5 and recommends upgrading to Natural 4.1 as soon as possible. ITS is preparing to upgrade to version 4.1.3 in all environments.

Testing with version 4.1.3 is currently in progress. ***Please see the ITS Change Management Schedule for affected environments, time, and dates.***

Software AG will not support programs cataloged prior to version 2.2 and recommends re-cataloging such programs before migrating to the new release. The DBA group has verified that programs cataloged under versions 1 and 2.1 do not function and must be re-cataloged. The following pages contain documentation from the Natural 4.1 Release Notes describing specific compatibility issues.



## Compatibility

- Applications Created with Previous Natural Versions
- Execute Applications Cataloged with Natural Version 4.1 with Natural Version 3.1
- Data Area Editor

## Applications Created with Previous Natural Versions

Applications that were created with Natural Version 2.2, 2.3 or 3.1 for Mainframes can be executed with Natural Version 4.1 for Mainframes without any adjustments to the programs or any conversion or migration procedure being required. This applies also to programming objects that have been cataloged with the Natural Optimizer Compiler.



Applications cataloged with Natural Version 2.1 must be recataloged before execution with Version 4.1. This applies also to data areas that are to be used in programming objects.

Software AG strongly recommends that existing applications be recataloged with Natural Version 4.1 to take advantage of improved runtime handling.

## Execute Applications Cataloged with Natural Version 4.1 with Natural Version 3.1

To execute applications cataloged with Natural Version 4.1 with Natural Version 3.1, it is necessary to recatalog the application with Natural Version 3.1.

To reject syntax constructions that are supported by Version 4.1 - but not by Version 3.1 - when developing applications with Natural Version 4.1, the V31COMP option has been provided for the COMPOPT system command.

## Data Area Editor

Data areas containing field definitions that make use of new features introduced with Natural Version 4.1 (for example, dynamic variables) are stored in a new and extended source format in the FUSER system file. Such data areas cannot be used or edited with Natural Version 3.1.

Data areas containing only field definitions that are valid with Natural Version 3.1 are stored by default in the old format compatible with Natural Version 3.1 to allow for sharing the data area between a Natural Version 3.1 and Natural Version 4.1



environment.

The V31COMP compiler option may be used to make sure that a data area that is edited and cataloged with the Natural Version 4.1 data area editor can still be cataloged with Natural Version 3.1.

## Changes Introduced with Previous Natural Versions

The following important changes that have been introduced with previous Natural versions should be considered when you upgrade your installation to Natural Version 4.1:

- Position Calculation for INPUT, PRINT and WRITE Statement Corrected
- Length Calculation for Edit Masks with Leading Filler Character Corrected
- Determination of Window Size Corrected

### Position Calculation for INPUT, PRINT, and WRITE Statement Corrected

With Natural Version 3.1, if the position of an output element in an INPUT, PRINT or WRITE statement is determined by both tabulation (*nT*) and space insertion (*nX*) and the tabulation position is greater than 1, for example WRITE 3T 4X #FIELD, the calculated position of the output item is one byte less than the correct position.

With Natural Version 4.1, calculation of the position has been corrected. The calculation result is now the same as with Natural for UNIX or Windows. The new calculation applies if the programming object is recataloged.

This change may lead to slightly different output.

This change does not affect output elements with only tabulation (*nT*) or only space insertion (*nX*) or both tabulation and space insertion with a tabulation position of 1, for example WRITE 1T 5X #FIELD.

### Length Calculation for Edit Masks with Leading Filler Character Corrected

With Natural Version 3.1.5, leading filler characters specified in edit masks for numeric operands are no longer counted as being part of the edit mask. This may reduce the output length of numeric fields with an associated edit mask so that following output in the same line is shifted one position to the left.

To apply the correction to an existing object, it must be cataloged with Natural Version 3.1.5 or above.



### **Changes and Enhancements Planned for Next Major Release of Natural**

With the next major release of Natural, the following changes and enhancements will be provided:

- Discontinued Support of Applications Cataloged with Natural Version 2.2
- Discontinued Support of V31COMP Compiler Option
- Discontinued Support of Utilities SYSTRANS and NATUNLD/NATLOAD
- Changed Default of Data Area Source Format

### **Discontinued Support of Applications Cataloged with Natural Version 2.2**

The next major release of Natural will require that all applications cataloged with Natural Version 2.2 be recataloged before execution with that version.

This will apply also to data areas that are to be used in programming objects.

Software AG strongly recommends that existing applications be recataloged with Natural Version 4.1 to take advantage of improved runtime handling.

### **Discontinued Support of V31COMP Compiler Option**

With the next major release of Natural, the V31COMP compiler option will be dropped. This option can be used in Natural Version 4.1 to disallow the usage of new Natural Version 4.1 programming language enhancements for compatibility purposes with Natural Version 3.1.

### **Discontinued Support of Utilities SYSTRANS and NATUNLD/NATLOAD**

With the next major release of Natural, the utilities SYSTRANS and NATUNLD/NATLOAD will cease to be available. The functionality provided by SYSTRANS and NATUNLD/NATLOAD is available with the Natural Object Handler, which was introduced with Natural Version 4.1.

### **Changed Default of Data Area Source Format**



With Natural Version 4.1, the default format for storing data areas in the FUSER system file is the format compatible with Natural Version 3.1. With the next major release of Natural, the default will be changed to the new and extended format introduced with Natural Version 4.1.

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Compatibility Natural 4.1.3 Release Notes - General Information

